Attorney's Docket No.:10559/09600/P7315/Intel Corporation

In the claims:

1. (Currently amended) A method for real-time measurement of the performance of communications on a large area network between a selected server and a plurality of users, based upon actual user experience, including:

(a) accessing a server log having records of actual user access to the selected server;

(b) aggregating records from the server log into a plurality of aggregate slots, each slot having at least one time bin which represents an interval of time, based on an aggregation method;

(c) performing at least one statistical analysis separately on [of] each time bin of each aggregate slot; and

(d) outputting the results of such statistical analysis as an indication of actual server usage by users.

2. (Original) The method of claim 1, further including filtering out selected records from the server log before the step of aggregating.

3. (Original) The method of claim 1, further including generating an event notification if a selected statistical analysis value is abnormal.

5

4. (Original) The method of claim 1, further including selecting the aggregation method from a set of aggregation methods.

5. (Original) The method of claim 1, wherein the aggregation method includes aggregation by log-file record column data value for each record from the server log.

6. (Original) The method of claim 1, further including:

(e) determining geographical or source information for each record; and

(f) selecting the aggregation method to aggregate records based on such geographical or source information.

7. (Original) The method of claim 6, wherein determining geographical or source information for each record includes:

(g) defining a database comprising large area network address blocks having geographical or source information;

(h) comparing an address field in each record to the address blocks in the database; and

(i) associating with each record the geographical or source information from an address block matching the address field of the record.

6

Attorney's Docket No.:10559/09600/P7315/Intel Corporation

8. (Original) The method of claim 7, wherein comparing an address field in each record to the address blocks in the database includes:

(j) defining an array of binary trees for the address blocks in the database, each address block within a binary tree within an array element being masked by a corresponding unique subnet mask value;

(k) masking each address field in each record by a unique subnet value corresponding to a selected array element;

(l) comparing each masked address field to an address field of the address blocks within the binary tree of the selected array element;

(m) outputting selected fields of any matching address block; and

(n) otherwise, continuing the step of comparing with a next selected array element until a match is found or all array elements have been compared.


9. (Original) The method of claim 1, further including:

(o) determining exit routing paths from each selected server based on the records from the server log;

(p) determining a best performing exit route based on the statistical analysis of records from the server log;

7

(q) biasing incoming and outgoing communications with respect to each server to use the determined best performing exit route.

10. (Withdrawn)

11. (Currently amended) A system for real-time measurement of the performance of communications on a large area network between a selected server and a plurality of users, based upon actual user experience, including:

(w) a server log having records of actual user access to the selected server;

(x) means for accessing and aggregating records from the server log into a plurality of aggregate slots, each having at least one time bin <u>which represents an interval of time</u>, based on an aggregation method;

(y) means for performing at least one statistical analysis of each time bin of each aggregate slot; and

(z) means for outputting the results of such statistical analysis as an indication of actual server usage by users.

12. (Currently amendment) The system of claim 11, further including means for filtering out selected records from the server log before the step <u>of</u> aggregating.

8

13. (Original) The system of claim 11, further including means for generating an event notification if a selected statistical analysis value is abnormal.

14. (Original) The system of claim 11, further including means for selecting the aggregation method from a set of aggregation methods.

15. (Original) The system of claim 11, wherein the aggregation method includes aggregation by log-file record column data value for each record from the server log.

16. (Original) The system of claim 11, further comprising:

(aa) means for determining geographical or source information for each record; and

(bb) means for selecting the aggregation method to aggregate records based on such geographical or source information.

17. (Original) The system of claim 16, wherein the means for determining geographical or source information for each record includes:

9

Attorney's Docket No.:10559/09600/P7315/Intel Corporation

(cc) a database comprising large area network address blocks having geographical or source information;

(dd) a comparison function for comparing an address field in each record to the address blocks in the database; and

(ee) an associating function for associating with each record the geographical or source information from an address block matching the address field of the record.

18. (Original)  The system of claim 17, wherein the comparison function includes:

(ff) an array of binary trees from the address blocks in the database, each address block within a binary tree within an array element being masked by a corresponding unique subnet mask value;

(gg) means for masking each address field in each record by a unique subnet value corresponding to a selected array element;

(hh) means for comparing each masked address field to an address field of the address bocks within the binary tree of the selected array element;

(ii) means for outputting selected fields of any matching address block ;and

(jj) means for otherwise continuing the step of comparing with a next selected array element until match is found or all array elements have been compared.

10

19. (Original) The system of claim 11, further including:

(kk) means for determining exit routing paths for each selected server based on the records from the server log;

(ll) means for determining a best performing exit route based on the statistical analysis of records from the server log;

(mm) means for biasing incoming and outgoing communications with respect to each server to use the determined best performing exit route.

20. (Withdrawn)


21. (Currently amended) A computer program, stored on a computer-readable medium, for real-time measurement of the performance of communications on a large area network between a selected server and a plurality of users, based upon actual user experience, the computer program comprising instructions for causing a coputer system to:

(ss) access a server log having records of actual user access to the selected server;

(tt) aggregate records from the server log into a plurality of aggregate slots, each having at least one time bin, based on an aggregation method;

11

(uu) perform at least one statistical analysis of each time

bin, representing a time interval, of each aggregate slot; and

(vv) output the results of such statistical analysis as an

indication of actual server usage by users.


22. (Original) The computer program of claim 21, further

including instructions for causing the computer system to filter

out selected records from the server log before the step of

aggregating.


23. (Original) The computer program of claim 21, further

including instructions for causing the computer system to

generate an event notification if a selected statistical

analysis value is abnormal.


24. (Original) The computer program of claim 21, further

including instructions for causing the computer system to select

the aggregation method from a set of aggregation methods.


25. (Original) The computer program of claim 21, wherein

the aggregation method includes aggregation by log-file record

column data value for each record from the server log.


12

26. (Original) The computer program of claim 21, further including instructions for causing the computer system to:

(ww) determine geographical or source information for each record; and

(xx) select the aggregation method to aggregate records based on such geographical or source information.

27. (Original) The computer program of claim 26, wherein the instructions for causing the computer systems to determine geographical or source information for each record further include instructions for causing the computer system to:

(yy) define a database comprising large area network address blocks having geographical or source information;

(zz) compare an address field in each record to the address blocks in the database; and

(aaa) associate with each record the geographical or source information from an address block matching the address field of the record.

28. (Original) The computer program of claim 27, wherein the instructions for causing the computer system to compare an address field in each record to the address blocks in the database include instructions for causing the computer system to:

13

(bbb) define an array of binary trees for the address

blocks in the database, each address block within a binary tree

within an array element being masked by a corresponding unique

subnet mask value;

(ccc) make each address field in each record by a unique

subnet value corresponding to a selected array element;

(ddd) compare each masked address field to an address field

of the address blocks within the binary tree of the selected

array element;

(eee) output selected fields of any matching address block;

and

(fff) otherwise, continue the step of comparing with a next

selected array element until a match is found or all array

elements have been compared.


29. (Original) The computer program of claim 21, further

including instructions for causing the computer system to:

(ggg) determine exit routing paths from each selected

server based on the records from the server log;

(hhh) determine a best performing exit route based on the

statistical analysis of records from the server log;

(iii) bias incoming and outgoing communications with

respect to each server to use the determined best performing

exit route.


14

Attorney's Docket No.:10559/09600/P7315/Intel Corporation

Sub Bl

30.   (Withdrawn)

15

A